

Along Galisteo creek, in central New Mexico, as well as on the Rio Grande, 100 miles further south, the writer has sought in vain for specimens of the *Halymenites*, both in 1879 and 1881. The furoid seems to be wholly wanting in the Laramie area of central New Mexico.

Comparing the distribution at the several localities mentioned, we have as the vertical extent of the furoid :

In northern Colorado, along South Platte.....	700'+
In central Colorado, Cañon City field.....	400'
In southern Colo. and northern N. M., Trinidad field.	80'
In central New Mexico, Galisteo creek and Rio Grande.	0'

Halymenites major, along the eastern foot of the Rocky mountains, is as thoroughly diagnostic of the Fox Hills group a *Arthrophyeus harlani* is of the Medina sandstone in the Appalachian region. The *Halymenites* sandstone of the Trinidad field, the lower 400 feet of the Cañon City column, and the enormous mass of sandstone on the South Platte, below St. Vrain's creek, are equivalent and represent the Fox Hills group, as generally accepted. Coal occurs in them all, but most abundantly in the Cañon City area. It should not be forgotten, however, that the South Platte locality is at 70 miles from the mountains. When the section has been made from the mountains to that locality, not a little of the productive coal series will be found represented on the Platte by this sandstone group.

The Fox Hills group, as generally accepted, thins out southward and finally disappears before reaching central New Mexico.

Stated Meeting, October 21, 1881.

Present, 15 members.

President, FREDERICK FRALEY, in the Chair.

Mr. Aubrey H. Smith presented his photograph for the album.

Letters of envoy were received from the Second Geological Survey of Pennsylvania, the Johns Hopkins University, and the Geological Survey of the United States.

Donations to the Library were received from the Gazette Hongroise; J. M. Schary's heirs, Prag; Royal Institute, Venice; Revue Politique; Royal Academy, Brussels; Nature; Essex Institute; S. H. Scudder; Board of Education, Providence, R. I.; Wesleyan University; Silliman's Journal; New York Academy of Science; Franklin Institute; Medical Jour-

nal and News; E. D. Cope; H. Phillips, Jr.; Geological Survey of Pennsylvania; American Journal of Mathematics; U. S. Geological Surveys; Commissioners of Education; J. Hotchkiss; A. W. Williamson, and the Geological Survey of Canada.

The deposit of the late Prof. J. F. Frazer's portrait in the Hall of the Society, by his son Prof. Persifor Frazer, during his absence in Europe, was on motion ordered to be placed on the minutes.

Mr. Patterson accepted by letter his appointment. (See last meeting.)

The following letter was read:

"To the Secretary of the American Philosophical Society.

DEAR SIR:—In reply to your inquiry under date of the 10th instant, it may be briefly stated that Carlile Pollock Patterson was born at Shieldsboro, Bay St. Louis, Mississippi, August 24, 1816. He was appointed midshipman in the United States Navy in 1830, served in the Mediterranean Squadron, and in 1836 returned home, and graduated from Georgetown College, Kentucky, in 1838. Having served as passed midshipman on the Coast Survey until 1841, he was again on naval sea service until 1844, and subsequently as lieutenant United States Navy, had charge of a hydrographic party on the Coast Survey for four years. In 1850 he took command of a Pacific mail steamship, and continued in that and other private business until 1861. He then returned to the Coast Survey as Inspector of Hydrography, and so remained until he was appointed Superintendent of this work in February, 1874. His death took place at "Brentwood," his residence near Washington, on Monday, August 15th, 1881.

Yours respectfully,

J. E. HILGARD,

In charge of Coast and Geodetic Survey.

The death of Dr. B. H. Coates, the oldest surviving member of the Society, on the 18th instant, aged 83 years and 11 months, was reported.

On motion, Dr. Ruschenberger was appointed to prepare an obituary notice of the deceased.

Prof. Haupt exhibited fragments of terra cotta from the Northern Pacific Railroad crossing of the Little Missouri river, produced by the spontaneous combustion of the Lignite beds between the clay-beds of the bad lands, and extensively employed for ballasting the railroad. Also specimens of silici-

fied wood, one of which may possess archæological value, showing as it does two distinct cuts with an axe; but Prof. Cope expressed the opinion that the chips had been made in the already silicified wood, which is soft enough to cut. At present the locality is high rolling ground destitute of springs, and showing no marks of volcanic action. Most of the standing stumps have diameters varying from one to two feet, but one of them measures nine feet.

A beautiful reduced contour map [in MS.] of the Bald Eagle mountain and Birmingham hills in Blair and Huntingdon counties, Pennsylvania, was exhibited by Mr. Lesley. It represents a recent survey for geological purposes made by Messrs. E. B. and O. B. Harden, Topographical Assistants on the State Survey. The peculiar form of the mountain range made visible by this survey will probably afford the long desired explanation of the structural character of the great faulted anticlinal of Sinking valley.

"Notes on a possible Adite element in the early history of Egypt," were read, in part, by Mr. Lesley; the reading of the remainder was postponed to another meeting.

Pending nominations Nos. 934 to 945 were read, and with the exception of nomination, No. 935 (on motion postponed) were balloted for.

A special report of the Finance Committee on the subject referred to it at the last meeting was read and adopted.

Respecting certain uninvested funds, the Committee on Finance received power to act.

Mr. Fraley reported that he had received and paid over to the Treasurer the quarterly rent from the Michaux Legacy, due October 1st, amounting to \$131.18.

The following new members were declared duly elected:

Henry H. Gorringer, Lieutenant-Commander U. S. N.

Jedediah Hotchkiss, Esq., Stanton, Va.

Charles C. Jones, Jr., Esq., Augusta, Georgia.

John Evans, Esq., F.R.S. Nash Mills, Hemel-Hempstead, England, President of the Anthropological Society.

Philip Price Sharpless, Esq., West Chester, Pennsylvania.

Charles A. McCall, M.D., 3941 Chestnut Street, Philadelphia.

C. L. Doolittle, Professor of Mathematics and Astronomy,
Lehigh University, Bethlehem, Pennsylvania.

Mansfield Merriman, Professor of Civil Engineering, Lehigh
University, Pennsylvania.

Rev. A. Renard, Soc. Jes., Director of the Musée Royal,
Brussels.

J. B. Stallo, Esq., Cincinnati, Ohio.

Wm. E. Gladstone, Prime Minister of England.

And the meeting was adjourned.

The Brain of the Cat, Felis domestica. 1. Preliminary Account of the Gross Anatomy. With four plates. By Burt G. Wilder, M.D., Professor of Comparative Anatomy, etc., in Cornell University, and of Physiology in the Medical School of Maine, Member of the Am. Neurological Association, etc.

(Read before the American Philosophical Society, July 15, 1881.)

This paper is in four parts:—A. Introduction. B. The macroscopic vocabulary of the brain. C. List of points to be elucidated. D. Explanation of the plates.

A. INTRODUCTION.

The present paper is the first of a series of contributions to the knowledge of the brain of the domestic cat. A second—*A Description of the Cerebral Fissures, together with their Synonymy*—has been nearly ready for a year, and a brief preliminary abstract of it has been published (Wilder *s*),* but it will more properly follow the present general account of the entire brain.

The title of the series is made comprehensive in order that the subject may be discussed from any point of view. I hope, therefore, that others

*This number refers to the list at the end of this paper. In that list, the names of the *authors* are placed in *alphabetical order*. The titles of *separate works* are designated by *letters*, and their order has no significance. The titles of *papers* are *numbered*. In the case of papers published between 1800 and 1873, the numbers correspond to those in the chronological "Catalogue of Scientific Papers," published by the Royal Society of London. In other cases the numbers are only provisional, and are printed in italics.

The references are made as follows: the name of the author is given first, unless the author has been indicated already; then follows the letter or the number by which the title of the work or paper is designated upon the list; if a Roman numeral is given it denotes the number of the volume; and the last number is that of the page. The system of references to a List was followed by me in 1872, in the paper entitled *Intermembral Homologies* (10), and has been since adopted by others.